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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/655,331	09/04/2003	Dennis O. Falaas	48748US019	6100
32692	7590	07/18/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			TRAN, THAO T	
PO BOX 33427			ART UNIT	
ST. PAUL, MN 55133-3427			PAPER NUMBER	

1711

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/655,331	Applicant(s) FALAAS ET AL.	
	Examiner Thao T. Tran	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-24 and 27-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-24, 27-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to the Reply filed on 4/27/2006.
2. In this Reply, there has been no change in the claims. Claims 17-24, 27-28, and 30-39 are currently pending in this application.
3. The prior art rejections of the claims in the prior Office action are maintained and reiterated as follows.

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 17-18, 21, 23-24, 35-37, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Nippon Carbide. The examiner refers to the English language equivalent of Nippon Carbide, Ochi et al. (US Pat. 5,225,267).

The reference teaches a laminated film resin comprising a PVC resin film, a polyurethane resin layer, and a metal layer adhering to the polyurethane layer (abstract). In this case, PVC serves as a clear coat protective layer (col. 9 lines 13-21). The metal layer is visible through the PVC and polyurethane layers (col. 2 lines 61-68). Metals for the metal layer include aluminum, gold, silver, nickel, and chromium (col. 14 lines 51-54). The polyurethane layer includes a crosslinking agent (col. 11 line 56-col. 12 line 5) and may also include colorants (col. 13 lines 3-6). Figures 1 and 2 show adhesive backings on the metal layer and release backings on the adhesive layer. Also, surface coatings are noted (col. 9 lines 22-24).

Additionally, the reference suggests blending the PVC material with urethane resins to form a clear protective layer (col. 4 lines 54-61). Also, the reference teaches printing and providing designs on the PVC layer using ink thus suggesting printed messages, decorative patterns, and color layers on an outer surface of the polyurethane layer (col. 18 lines 1-9).

Regarding the limitations to the substrate derived from an aqueous dispersion and the polyurethane clear coat layer, if any, derived from a solvent-based layer, it is noted that these limitations follow product-by-process format. Since the solvent or aqueous medium would not be present in the final article, which is claimed, it is the examiner's position that polyurethane layers formed by aqueous dispersions would be indistinguishable from those formed from solution.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 19-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nippon Carbide in view of Dunning et al. (US Pat. 4,101,698).

Nippon Carbide applies as above, teaching several metals for the metal layers but failing to mention the use of indium or tin materials or the use of primers. Dunning applies as above, where indium and tin materials are noted as equivalents to other metals, including nickel, silver, chromium, and aluminum (col. 2 lines 1-13). The metals are highly reflective and capable of being vacuum deposited. Thus, it is the examiner's position that it would have been prima facie obvious to use indium, tin, or alloys thereof in Nippon Carbide's invention with the expectancy of forming equally reflective and processible metal layers.

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Also, Dunning teaches that primer layers can be used on the metal layer to improve adhesion between the laminate and the substrate to be bonded (col. 6 lines 14-35). Thus, it is the examiner's position that it would have been prima facie obvious to use a primer layer in the laminates of Nippon Carbide to improve adhesion to bonding substrates.

8. Claims 27-28, 30-31, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunning et al. in view of Kunevicius (US Pat. 3,439,950).

Dunning teaches laminate structures comprising an adhesive layer, a visually continuous reflective metal layer, a polyurethane elastomeric film layer, and a release coated carrier layer (abstract, figure 1). The reference discusses reinforcing the opacity of the metal layer, indicating that the metal layer already contains a degree of opacity (col. 2 lines 46-48). Metals for the metal layer include chromium, nickel, stainless steel, aluminum, tin, indium, silver, and alloys thereof (col. 2 lines 1-13). The elastomeric film is preferably transparent to allow the metal layer to show through (col. 4 lines 32-59).

Dunning applies as above, noting the application of PSA materials to the metal layer but failing to mention the use of an adhesive foam tape. Kunevicius teaches that foam tapes are used to apply molding materials to automobile body, where the foam serves to improve vibration absorption to prevent delamination (col. 4 lines 18-51). It is the examiner's position that it would have been prima facie obvious to use foam tapes as the adhesive in Dunning's invention to improve vibration absorption and prevent delamination.

Regarding the limitation to the substrate derived from an aqueous dispersion, it is noted that this limitation follows product-by-process format. Since the aqueous medium would not be present in the final article, which is claimed, it is the examiner's position that polyurethane layers

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formed by aqueous dispersions would be indistinguishable from those formed from the reference.

9. Claims 27-28, 30-34, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nippon Carbide in view of Kunevicius.

Nippon Carbide applies as above, noting the application of PSA materials to the metal layer but failing to mention the use of an adhesive foam tape. Kunevicius teaches that foam tapes are used to apply molding materials to automobile body, where the foam serves to improve vibration absorption to prevent delamination (col. 4 lines 18-51). It is the examiner's position that it would have been prima facie obvious to use foam tapes as the adhesive in Nippon Carbide's invention to improve vibration absorption and prevent delamination.

Response to Arguments

10. Applicants' arguments have been considered and not found persuasive. Since Applicants' arguments are the same as presented in the prior Reply, the examiner's response from the prior Office action is maintained and reiterated below.

11. In response to the applicant's arguments that the claims are not anticipated, the examiner has explained that the dispersion limitations are interpreted as product-by-process limitations. It is the examiner's position that the resulting polyurethane layer would be the same regardless of the coating process. The declaration attempts to show the difference in polyurethane layers formed from different methods. However, the polyurethanes used in the examples appear to be different. One of skill in the art would expect different polyurethanes to have different properties.

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The applicant has not shown that the dispersion method itself serves to provide a different product.

12. Regarding the arguments concerning the 103 rejections, the examiner has provided motivation from the prior art that the substitution of metals would provide equally reflective and processible layers. One of skill in the art would recognize the equivalence of the layers and so would not need to experiment to realize the benefits of the metal layer substitution.

13. In response to the applicant's arguments that Kunevicius does not teach the claimed pressure sensitive adhesive foam tape, it is the examiner's position that the reference's teaching of a cellular cushion having a pressure-sensitive adhesive layer thereon constitutes a pressure sensitive adhesive foam tape. The reference teaches foam tape strips used to adhere a molding to an auto body part (col. 5 lines 31-41). An article containing a body, a foam layer, and an adhesive is encompassed by the term "adhesive foam tape".

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,


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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Thao T. Tran
Primary Examiner
Art Unit 1711

tt
July 13, 2006